

TABLE OF CONTENTS

I. REAL PARTY IN INTEREST	1
II. RELATED APPEALS AND INTERFERENCES	1
III. STATUS OF CLAIMS.....	2
IV. STATUS OF AMENDMENTS.....	2
V. SUMMARY OF CLAIMED SUBJECT MATTER.....	2
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.....	3
VII. ARGUMENT	4
VIII. CLAIMS APPENDIX	10
IX. EVIDENCE APPENDIX	15
X. RELATED PROCEEDINGS APPENDIX	16

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of : Customer Number: 46320
: :
Kwasi ASARE, et al. : Confirmation Number: 3074
: :
Application No.: 10/725,728 : Group Art Unit: 2191
: :
Filed: December 2, 2003 : Examiner: A. Khatri
: :
For: SCRIPT GENERATION ENGINE AND MAPPING SEMANTIC MODELS FOR
TARGET PLATFORM

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed September 11, 2007, and further in response to the Examiner reopening prosecution in the Office Action dated November 28, 2007, wherein Appellants appeal from the Examiner's rejection of claims 1-17.

I. REAL PARTY IN INTEREST

This application is assigned to IBM Corporation by assignment recorded on April 26, 2004, at Reel 014572, Frame 0465.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1-17 are pending and three-times rejected in this Application, and it is from the multiple rejections of claims 1-17 that this Appeal is taken.

IV. STATUS OF AMENDMENTS

The claims have not been amended subsequent to the imposition of the Third Office Action dated November 28, 2007 (hereinafter the Third Office Action).

V. SUMMARY OF CLAIMED SUBJECT MATTER

Referring to Fig. 1 and to independent claim 1, an application component distribution system includes a repository 120, a mapping 110, and a script generation engine 200. The repository 120 of semantic models are for interdependent ones of application components 130 (lines 4-10 of paragraph [0023] of Appellants' disclosure). The mapping 110 of individual listings in the semantic models are to target platform 190 specific installation instructions (lines 1-5 of paragraph [0024]). The script generation engine 200 is configured to produce a target specific set of instructions 160 for a specified application component based upon a mapping of at least one of the semantic models in the repository 120 (lines 6-14 of paragraph [0024]).

Referring to Fig. 2 and to independent claim 5, and script generation engine 200 comprises a communicate coupling, a mapping, and a script composition processor. The communicative coupling is to a repository 250 of semantic models 260 for interdependent ones of application components configured for installation in a target platform 210 (lines 5-11 of paragraph [0028]). The mapping of individual listings in the semantic models 260 are to specific installation instructions 270 for specific target platforms 210 (lines 6-7 of paragraph [0026]).

The script composition processor is programmed to produce a specific set of instructions 240 for installing a specified one of the interdependent application components 220, 230 in a specified one of the target platforms based upon the mapping (lines 5-8 of paragraph [0028]).

Referring to Fig. 3 and to independent claims 8 and 13, a method for generating an installation script for installing an application component to a specific target platform is disclosed. In block 330, a semantic model for the application component is retrieved from a communicatively coupled repository of semantic models (lines 4-5 of paragraph [0030]). In block 340, a set of dependent components required to be present in the specific target platform are determined from the semantic model (lines 5-10 of paragraph [0030]). In block 350, a set of resource requirements required to be met by the specific target platform are further determined from the semantic model (lines 1-9 of paragraph [0031]). In block 370, the set of dependent components and the set of resource requirements are mapped into platform specific instructions in a platform specific installation script (lines 4-10 of paragraph [0032]).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1-17 were rejected under 35 U.S.C. § 103 for obviousness based upon Hempstead et al., U.S. Patent No. 7,092,958 (hereinafter Hempstead), in view of Goiffon et al., U.S. Patent No. 6,785,882 (hereinafter Goiffon).

1

VII. ARGUMENT

THE REJECTION OF CLAIMS 1-17 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON HEMPSTEAD IN VIEW GOIFFON

4 For convenience of the Honorable Board in addressing the rejections, claims 4-5, 8, 10-
5 13 and 15-17 stand or fall together with independent claim 1; and claims 3, 6-7, 9, and 14 stand
6 or fall together with dependent claim 2.

7

8 As is evident from Appellants' comments below, there are questions as to how the
9 limitations in the claims correspond to features in the applied prior art. In this regard, reference
10 is made to M.P.E.P. § 1207.02, entitled "Contents of Examiner's Answer." Specifically, the
11 following is stated:

12 (A) CONTENT REQUIREMENTS FOR EXAMINER'S ANSWER. The examiner's
13 answer is required to include, under appropriate headings, in the order indicated, the following
14 items:
15 ...

16 (9)(e) For each rejection under 35 U.S.C. 102 or 103 where there are questions
17 as to how limitations in the claims correspond to features in the prior art even after the
18 examiner complies with the requirements of paragraphs (c) and (d) of this section, the
19 examiner must compare at least one of the rejected claims feature by feature with the
20 prior art relied on in the rejection. The comparison must align the language of the claim
21 side-by-side with a reference to the specific page, line number, drawing reference
22 number, and quotation from the prior art, as appropriate. (emphasis added)

23

24 Therefore, if the Examiner is to maintain the present rejections and intends to file an Examiner's
25 Answer, the Examiner is required to include the aforementioned section in the Examiner's
26 Answer.

27

28 Obviousness is a legal conclusion based on underlying facts of four general types, all of
29 which must be considered by the trier of fact: (1) the scope and content of the prior art; (2) the
30 level of ordinary skill in the art; (3) the differences between the claimed invention and the prior

1 art; and (4) any objective indicia of nonobviousness.¹ Upon reviewing the Examiner's statement
2 of the rejection in the Third Office Action, Appellants submit that the Examiner has failed to
3 clearly designate the teachings in Hempstead being relied upon the statement of the rejection. In
4 this regard, the Examiner's rejection under 35 U.S.C. § 103 also fails to comply with 37 C.F.R. §
5 1.104(c), which provides:

6 In rejecting claims for want of novelty or for obviousness, the examiner must cite the best
7 references at his or her command. When a reference is complex or shows or describes inventions
8 other than that claimed by the applicant, the particular part relied on must be designated as nearly
9 as practicable. The pertinence of each reference, if not apparent, must be clearly explained and
10 each rejected claim specified.

11
12 The Examiner has not designated the particular parts of Hempstead being relied "as
13 nearly as practicable." Instead, the Examiner's statement of rejection reproduces entire
14 paragraphs of the claims and asserts that all the limitations in the particular paragraph are
15 disclosed by certain cited passages within Hempstead. Although broadly identifying where the
16 Examiner believes the claimed limitations are disclosed in Hempstead, the statement of the
17 rejection fails to clearly identify many of the specific elements within Hempstead being relied
18 upon in the rejection, as required by 37 C.F.R. § 1.104(c).

19
20 By not clearly indicating those specific elements being relied upon in the prior art to
21 teach the invention, as recited in the claims, the Examiner has failed to properly establish the
22 underlying facts regarding (1) the scope and content of the prior art and (3) the differences
23 between the claimed invention and the prior art. Thus, the Examiner has improperly arrived at
24 the legal conclusion that the claimed invention is obvious based upon the combination of
25 Hempstead in view of Goiffon.

¹ See KSR Int'l v. Teleflex Inc., 550 U.S. ____ (2007); Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966); Continental Can Co. USA, Inc. v. Monsanto Co., 948 F.2d 1264, 1270, 20 USPQ2d 1746, 1750-51 (Fed. Cir. 1991); Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1566-68, 1 USPQ2d 1593, 1594 (Fed. Cir. 1987).

1

2 Claims 1, 5, 8, and 13

3 On pages 2 and 3 of the Third Office Action the Examiner referred to column 10, lines 5-

4 18 and column 6, lines 52-64 of Hempstead to teach the following limitations recited in claim 1:

5 a repository of semantic models for interdependent ones of application

6 components;

7 a mapping of individual listings in said semantic models to target platform

8 specific installation instructions.

9

10 Upon reviewing the Examiner's cited passages, which the Examiner reproduced on pages 2 and 3

11 of the Third Office Action, Appellants respectfully disagree with the Examiner's characterization

12 of the teachings of Hampstead.

13

14 It appears that the Examiner performed a keyword search using the phrases "semantic

15 models" and "mapping," and, based upon this search, identified Hempstead. However, despite

16 the phrases "semantic models" and "mapping" being found in the Examiner's cited passages,

17 Hempstead is silent as to the other limitations associated with claim 1.

18

19 For example, referring to column 10, lines 5-18, this passage is completely silent as to the

20 claimed "interdependent ones of application components." This passage is also silent as to a

21 repository (i.e., storage) of semantic models (i.e., a plurality of models). Instead, this passage

22 refers to a MDBC component returning its semantic model in a proprietary format and also how

23 to convert meta-data from the MDBC semantic model structure to the ODBC catalog model.

24

1 Regarding column 6, lines 52-64 of Hempstead, this passage does not refer back to the
2 alleged "semantic models" described in column 10, lines 5-18 despite this reference being
3 claimed. Moreover, the Examiner's cited passage is silent as to (i) a mapping of individual
4 listing; (ii) the individual listings are mapped to target platform specific installation instructions;
5 (iii) target platforms, in general, and (vi) installation instructions, in general.

6

7 Therefore, for the reasons stated above, the Examiner has failed to fully establish the
8 underlying facts regarding (1) the scope and content of the prior art and (3) the differences
9 between the claimed invention and the prior art. Notwithstanding, Hempstead fails to teach the
10 limitations for which the Examiner is relying upon Hempstead to teach.

11

12 On pages 3 and 4 of the Third Office Action, the Examiner relied upon the secondary
13 reference to teach the following limitation recited in claim 1:

14 a script generation engine configured to produce a target specific set of
15 instructions for a specified application component based upon a mapping of at
16 least one of said semantic models in said repository.

17

18 To teach this limitation the Examiner cited column 5, lines 19-25 and column 40, lines 15-22 of
19 Goiffon. Appellants again disagree with the Examiner's characterizations of the prior art.

20

21 Referring to column 5, lines 19-25, this passage merely describes the well-known and
22 generic concept that a script (executed by a script engine) can be used to complete a task
23 described by an associated process. The Examiner's cited passage of column 40, lines 15-22

1 further describes how a Plan element is created from a particular process. However, these
2 passages, with the exception of referring to a script engine, are silent as to remaining limitations
3 that the Examiner is relying upon Goiffon to teach.

4

5 Therefore, even if one having ordinary skill were realistically impelled to modify
6 Hempstead if view of Goiffon, the claimed invention, as recited in claim 1, would not result
7 since neither Hempstead nor Goiffon teach all of the limitations for which the Examiner is
8 relying upon these references to teach. Appellants incorporate herein, as also applying to claims
9 5, 8, and 13, the arguments presented above with regard to claim 1.

10

11 Claims 2, 6, 9, 14

12 On pages 4 and 5 of the Third Office Action, the Examiner relied upon column 13, lines
13 17-31 of Goiffon to teach the limitations recited in claim 1. Appellants respectfully disagree.

14

15 Claim 2 refers to elements of the claimed semantic models. Notwithstanding that the
16 Examiner's cited passage of column 40, lines 15-22, to teach the claimed script generation
17 engine, which uses a mapping of a semantic model, this passage does not refer to the element
18 repository 220 discussed in column 13, lines 17-31, the Examiner's cited passage does not teach
19 many of the limitations found in claim 2. For example, absent from the Examiner's cited passage
20 is a discussion of platform neutral installation instructions and target platform requirements.

21

Conclusion

Based upon the foregoing, Appellants respectfully submit that the Examiner's rejection under 35 U.S.C. § 103 is not viable. Appellants, therefore, respectfully solicit the Honorable Board to reverse the Examiner's rejection under 35 U.S.C. § 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: February 28, 2008

Respectfully submitted,

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VIII. CLAIMS APPENDIX

1. An application component distribution system comprising:
 - a repository of semantic models for interdependent ones of application components;
 - a mapping of individual listings in said semantic models to target platform specific installation instructions; and,
 - a script generation engine configured to produce a target specific set of instructions for a specified application component based upon a mapping of at least one of said semantic models in said repository.
2. The application component distribution system of claim 1, wherein each of said semantic models comprises a listing of component relationships, target platform requirements and platform neutral installation instructions.
3. The application component distribution system of claim 2, wherein said component relationships comprises at least one component relationship selected from the group consisting of a containment relationship, a usage relationship, a contradiction relationship, and an equivalence relationship.
4. The application component distribution system of claim 1, further comprising a Web services interface to said repository configured to permit remote access to said repository.
5. A script generation engine comprising:

a communicative coupling to a repository of semantic models for interdependent ones of application components configured for installation in a target platform;

a mapping of individual listings in said semantic models to specific installation instructions for specific target platforms; and,

a script composition processor programmed to produce a specific set of instructions for installing a specified one of the interdependent application components in a specified one of said target platforms based upon said mapping.

6. The script generation engine of claim 5, wherein each of said semantic models comprises a listing of component relationships, target platform requirements and platform neutral installation instructions.

7. The script generation engine of claim 6, wherein said component relationships comprises at least one component relationship selected from the group consisting of a containment relationship, a usage relationship, a contradiction relationship, and an equivalence relationship.

8. A method for generating an installation script for installing an application component to a specific target platform, the method comprising the steps of:

retrieving a semantic model for the application component from a communicatively coupled repository of semantic models;

determining from said semantic model, a set of dependent components required to be present in the specific target platform;

further determining from said semantic model a set of resource requirements required to be met by the specific target platform; and,

mapping said set of dependent components and said set of resource requirements into platform specific instructions in a platform specific installation script.

9. The method of claim 8, further comprising the steps of:

yet further determining from said semantic model a set of platform neutral installation operations; and,

further mapping said set of platform neutral installation operations into said platform specific instructions.

10. The method of claim 8, wherein the determining step comprises the steps of:

identifying a set of dependent components for the application component; and,

further identifying a set of sub-dependent components for at least one of said dependent components.

11. The method of claim 10, further comprising the step of repeating the identifying and further identifying steps for each dependent and sub-dependent component in a hierarchy of dependent components for the application component.

12. The method of claim 8, wherein the further determining step comprises the step of computing an composite set of resource requirements for the application component and for said set of dependent components.

13. A machine readable storage having stored thereon a computer program for generating an installation script for installing an application component to a specific target platform, the computer program comprising a routine set of instructions when executed cause the machine to perform the steps of:

retrieving a semantic model for the application component from a communicatively coupled repository of semantic models;

determining from said semantic model, a set of dependent components required to be present in the specific target platform;

further determining from said semantic model a set of resource requirements required to be met by the specific target platform; and,

mapping said set of dependent components and said set of resource requirements into platform specific instructions in a platform specific installation script.

14. The machine readable storage of claim 13, further comprising the steps of:

yet further determining from said semantic model a set of platform neutral installation operations; and,

further mapping said set of platform neutral installation operations into said platform specific instructions.

15. The machine readable storage of claim 13, wherein the determining step comprises the steps of:

identifying a set of dependent components for the application component; and,

further identifying a set of sub-dependent components for at least one of said dependent components.

16. The machine readable storage of claim 15, further comprising the step of repeating the identifying and further identifying steps for each dependent and sub-dependent component in a hierarchy of dependent components for the application component.

17. The machine readable storage of claim 13, wherein the further determining step comprises the step of computing an composite set of resource requirements for the application component and for said set of dependent components.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellants in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

Since Appellants are unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.